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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,813	07/17/2003	Thomas J. Henderson	SUP 6473	1342

321 7590 06/07/2005

SENNIGER POWERS LEAVITT AND ROEDEL  
ONE METROPOLITAN SQUARE  
16TH FLOOR  
ST LOUIS, MO 63102

EXAMINER
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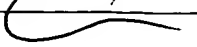
THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/621,813	Applicant(s)  HENDERSON ET AL.	
	Examiner Ernest G. Therkorn	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-55 is/are pending in the application.  
     4a) Of the above claim(s) 43-55 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 27-42 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |



The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-37 and 42 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Green (U.S. Patent No. 6,171,486). The claims are considered to read on Green (U.S. Patent No. 6,171,486). However, if a difference exists between the claims and Green (U.S. Patent No. 6,171,486), it would reside in optimizing the elements of Green (U.S. Patent No. 6,171,486). It would have been obvious to optimize the elements of Green (U.S. Patent No. 6,171,486) to enhance separation.

Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green (U.S. Patent No. 6,171,486) in view of Schick (U.S. Patent No. 5,651,885) and Horsman (U.S. Patent No. 6,783,673). At best, the claims differ from Green (U.S. Patent No. 6,171,486) in reciting the end cap is heat crimped. Schick (U.S. Patent No. 5,651,885) (column 6, lines 19-43 and column 9, lines 8-26) discloses crimping presses the column ends against the inner tube. Horsman (U.S. Patent No. 6,783,673) (column 10, lines 23-31) discloses that crimping a chromatography column may be performed

with or without heating. It would have been obvious to heat crimp in Green (U.S. Patent No. 6,171,486) because Schick (U.S. Patent No. 5,651,885) (column 6, lines 19-43 and column 9, lines 8-26) discloses crimping presses the column ends against the inner tube and Horsman (U.S. Patent No. 6,783,673) (column 10, lines 23-31) discloses that crimping a chromatography column may be performed with or without heating.

Claims 27-39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green (U.S. Patent No. 6,171,486) in view of Snyder (U.S. Patent No. 5,037,544) and "Ansys Diagnostics MetaFlash....Better Flash Cartridges." At best, the claims differ from Green (U.S. Patent No. 6,171,486) in reciting use of a luer fitting. Snyder (U.S. Patent No. 5,037,544) (column 6, lines 18-48) discloses that luer fittings are known in the art as effective chromatography column coupling means that are leak-proof and mechanically secure and permit coupled devices to be readily separated. "Ansys Diagnostics MetaFlash....Better Flash Cartridges" discloses that luer tipped outlets are used to create leak proof chromatography cartridges. It would have been obvious to use luer fittings in Green (U.S. Patent No. 6,171,486) because Snyder (U.S. Patent No. 5,037,544) (column 6, lines 18-48) discloses that luer fittings are known in the art as effective chromatography column coupling means that are leak-proof and mechanically secure and permit coupled devices to be readily separated and "Ansys Diagnostics MetaFlash....Better Flash Cartridges" discloses that luer tipped outlets are used to create leak proof chromatography cartridges.

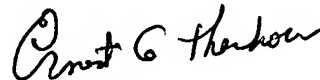
Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green (U.S. Patent No. 6,171,486) in view of Snyder (U.S. Patent No. 5,037,544)

and "Ansys Diagnostics MetaFlash....Better Flash Cartridges" as applied to claims 27-39 and 42 above, and further in view of Schick (U.S. Patent No. 5,651,885) and Horsman (U.S. Patent No. 6,783,673). At best, the claims differ from Green (U.S. Patent No. 6,171,486) in view of Snyder (U.S. Patent No. 5,037,544) and "Ansys Diagnostics MetaFlash....Better Flash Cartridges" in reciting the end cap is heat crimped. Schick (U.S. Patent No. 5,651,885) (column 6, lines 19-43 and column 9, lines 8-26) discloses crimping presses the column ends against the inner tube. Horsman (U.S. Patent No. 6,783,673) (column 10, lines 23-31) discloses that crimping a chromatography column may be performed with or without heating. It would have been obvious to heat crimp in Green (U.S. Patent No. 6,171,486) because Schick (U.S. Patent No. 5,651,885) (column 6, lines 19-43 and column 9, lines 8-26) discloses crimping presses the column ends against the inner tube and Horsman (U.S. Patent No. 6,783,673) (column 10, lines 23-31) discloses that crimping a chromatography column may be performed with or without heating.

The remarks urge that the examination of an additional invention would not be an undue burden on the examiner. However, the additional search and different issues of patentability would be an enormous burden on the examiner. As such, the restriction requirement has been reconsidered, deemed proper, and made final for the reasons of record.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1723**

EGT  
June 3, 2005